

# TEST REPORT

**Applicant:** TFIVE PTY LTD  
**Address:** 10/29 Lorne Ave Killara NSW 2071 Australia  
**Equipment Type:** Smart Door Lock A100  
**Model Name:** ZNMS02ES  
**Brand Name:** Aqara  
**Test Standard:** AS/NZS CISPR 32: 2015+AMD1:2020  
**Test Date:** Jun. 06, 2022  
**Date of Issue:** Jul. 04, 2022

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Fei Liu

Fei Liu

**Checked by:** Xia Long

Xia Long

**Approved by:** Liao Jianming

(Technical Director)

Liao Jianming

### Revision History

| Version        | Issue Date           | Revisions Content    |
|----------------|----------------------|----------------------|
| <u>Rev. 01</u> | <u>Jul. 04, 2022</u> | <u>Initial Issue</u> |

## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>1 GENERAL INFORMATION.....</b>                            | <b>4</b>  |
| 1.1 Identification of the Testing Laboratory.....            | 4         |
| 1.2 Identification of the Responsible Testing Location ..... | 4         |
| <b>2 PRODUCT INFORMATION .....</b>                           | <b>5</b>  |
| 2.1 Applicant Information.....                               | 5         |
| 2.2 Manufacturer Information .....                           | 5         |
| 2.3 Factory Information .....                                | 5         |
| 2.4 General Description for Equipment under Test (EUT).....  | 5         |
| 2.5 Ancillary Equipment.....                                 | 6         |
| 2.6 Technical Information .....                              | 6         |
| <b>3 SUMMARY OF TEST RESULTS .....</b>                       | <b>7</b>  |
| 3.1 Test Standards.....                                      | 7         |
| 3.2 Verdict.....   | 7         |
| 3.3 Test Uncertainty .....                                   | 7         |
| <b>4 GENERAL TEST CONFIGURATIONS.....</b>                    | <b>8</b>  |
| 4.1 Test Environments,Test Date and Test Engineer .....      | 8         |
| 4.2 Test Equipment .....                                     | 8         |
| 4.3 Test Enclosure list .....                                | 9         |
| 4.4 Test Configurations .....                                | 9         |
| 4.5 Test Setups .....  | 10        |
| 4.6 Test Conditions .....                                    | 13        |
| <b>5 TEST ITEMS.....</b>                                     | <b>14</b> |
| 5.1 Emission Tests .....                                     | 14        |
| <b>ANNEX A TEST RESULTS.....</b>                             | <b>18</b> |
| A.1 Radiated Emission .....                                  | 18        |

|   |    |
|---|----|
| A.2 Conducted disturbance voltage at mains terminals Test ..... | 22 |
| A.3 Conducted disturbance for asymmetric mode .....             | 22 |
| A.4 Conducted differential voltage emission.....                | 22 |
| ANNEX B TEST SETUP PHOTOS .....                                 | 23 |
| ANNEX C EUT EXTERNAL PHOTOS.....                                | 23 |
| ANNEX D EUT INTERNAL PHOTOS .....                               | 23 |

## 1 GENERAL INFORMATION

### 1.1 Identification of the Testing Laboratory

|              |  |
|--------------|--|
| Company Name | Shenzhen BALUN Technology Co., Ltd.  |
| Address      | Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, GuangDong Province, China |
| Phone Number | +86 755 6685 0100  |

### 1.2 Identification of the Responsible Testing Location

|               |   |
|---------------|---|
| Test Location | Shenzhen BALUN Technology Co., Ltd.   |
| Address       | Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, GuangDong Province, China  |
| Description   | All measurement facilities used to collect the measurement data are located at Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, GuangDong Province, China |

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

|           |  |
|-----------|--|
| Applicant | TFIVE PTY LTD                              |
| Address   | 10/29 Lorne Ave Killara NSW 2071 Australia |

### 2.2 Manufacturer Information

|              |  |
|--------------|--|
| Manufacturer | Lumi United Technology Co., Ltd.   |
| Address      | Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No. 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China |

### 2.3 Factory Information

|         |     |
|---------|-----|
| Factory | N/A |
| Address | N/A |

### 2.4 General Description for Equipment under Test (EUT)

|   |                      |
|---|----------------------|
| EUT Name                                  | Smart Door Lock A100 |
| Model Name Under Test                     | ZNMS02ES             |
| Series Model Name                         | N/A                  |
| Description of Model name differentiation | N/A                  |
| Hardware Version                          | V1.3.1               |
| Software Version                          | V0002                |
| Dimensions (Approx.)                      | N/A                  |
| Weight (Approx.)                          | N/A                  |

## 2.5 Ancillary Equipment

|                       |                      |          |
|-----------------------|----------------------|----------|
| Ancillary Equipment 1 | Battery              |          |
|                       | Brand Name           | PAIRDEER |
|                       | Model No.            | LR6      |
|                       | Serial No.           | N/A      |
|                       | Capacity             | 2950 mAh |
|                       | Rated Voltage        | N/A      |
|                       | Limit Charge Voltage | N/A      |

## 2.6 Technical Information

|                                   |                        |   |
|-----------------------------------|------------------------|---|
| Network and Wireless connectivity | Bluetooth, Zigbee, NFC |   |
| Interfaces present on the EUT     | AC Ports               | No AC Ports.  |
|                                   | DC Ports               | From power supply to EUT, the DC port cable length is less than 3m. |
|                                   | I/O Ports              | No I/O ports.   |
|                                   | Telecom Ports          | No Tel ports.   |

### 3 SUMMARY OF TEST RESULTS

#### 3.1 Test Standards

| No. | Identity                           | Document Title   |
|-----|------------------------------------|--|
| 1   | AS/NZS CISPR 32:<br>2015+AMD1:2020 | Electromagnetic compatibility of multimedia equipment —<br>Emission requirements |

#### 3.2 Verdict

| No.  | Base Standard | Description        |                      | Test Verdict | Result    | Remark |
|--|---------------|--------------------|----------------------|--------------|-----------|--------|
| <b>Emission</b>  |               |                    |                      |              |           |        |
| 1  | CISPR 32      | Radiated Emission  | Below 1 GHz          | Pass         | ANNEX A.1 | --     |
|  |               |                    | Above 1 GHz          | Pass         |           | Note 1 |
| 2  | CISPR 32      | Conducted Emission | Mains terminals      | N/A          | ANNEX A.2 | --     |
|  |               |                    | Asymmetric mode      | N/A          | ANNEX A.3 | Note 2 |
|  |               |                    | Differential voltage | N/A          | ANNEX A.4 | Note 3 |
| Note 1: The highest frequency of the internal sources of the EUT is above 108 MHz, the measurement shall be made above 1 GHz.<br>Note 2: For cables longer than 3 m only.<br>Note 3: For Class B broadcasting receiver only. |               |                    |                      |              |           |        |

#### 3.3 Test Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| Measurement                                   | Value   |
|---|---------|
| Conducted emissions (9 kHz-30 MHz)-AMN        | 3.22 dB |
| Conducted emissions (150 kHz-30 MHz)-AAN_CAT3 | 3.66 dB |
| Conducted emissions (150 kHz-30 MHz)-AAN_CAT5 | 4.10 dB |
| Conducted emissions (150 kHz-30 MHz)-AAN_CAT6 | 4.58 dB |
| Radiated emissions (30 MHz-1 GHz)-10m         | 4.80 dB |
| Radiated emissions (30 MHz-1 GHz)-966#2       | 4.76 dB |
| Radiated emissions (30 MHz-1 GHz)-966#4       | 4.38 dB |
| Radiated emissions (1 GHz-18 GHz)-10m         | 4.72 dB |
| Radiated emissions (1 GHz-18 GHz)-966#2       | 4.88dB  |
| Radiated emissions (1 GHz-18 GHz)-966#4       | 5.04 dB |

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments, Test Date and Test Engineer

| Test items        | Voltage            | Temper ature | Relative Humidit y | Ambient Pressure | Test Date     | Test Engineer |
|-------------------|--------------------|--------------|--------------------|------------------|---------------|---------------|
| Radiated Emission | DC 5V from battery | 24.6°C       | 53%                | 101kPa           | Jun. 06, 2022 | Tian Shuo     |

### 4.2 Test Equipment

| Radiated Emission Test For Frequency Below 1 GHz (3m-966#4) |              |            |             |            |            |                                     |
|---|--------------|------------|-------------|------------|------------|-------------------------------------|
| Description   | Manufacturer | Model      | Serial No.  | Cal. Date  | Cal. Due   | Use                                 |
| EMI Receiver  | Agilent      | N9038A     | MY53220118  | 2021.09.13 | 2022.09.12 | <input checked="" type="checkbox"/> |
| Amplifier (30-1GHz)   | COM-MV       | ZT30-1000M | B2017119082 | 2021.09.13 | 2022.09.12 | <input checked="" type="checkbox"/> |
| Test Antenna-Bi-Log   | SCHWARZBECK  | VULB 9163  | 9163-624    | 2021.08.20 | 2024.08.19 | <input checked="" type="checkbox"/> |
| Anechoic Chamber  | ChangNing    | 9m*6m*6m   | 966#4       | 2020.03.16 | 2023.03.15 | <input checked="" type="checkbox"/> |
| Description   | Manufacturer | Name       |             | Version    |            | Use                                 |
| Test Software   | BALUN        | BL410-E    |             | V19.918    |            | <input checked="" type="checkbox"/> |

| Radiated Emission Test For Frequency Above 1 GHz (3m-966#4) |               |                      |            |            |            |                                     |
|---|---------------|----------------------|------------|------------|------------|-------------------------------------|
| Description   | Manufacturer  | Model                | Serial No. | Cal. Date  | Cal. Due   | Use                                 |
| EMI Receiver  | Agilent       | N9038A               | MY53220118 | 2021.09.13 | 2022.09.12 | <input checked="" type="checkbox"/> |
| Amplifier (1-12GHz)   | COM-MV        | DLNAB-1000-12000-002 | 18080279   | 2021.09.13 | 2022.09.12 | <input checked="" type="checkbox"/> |
| Amplifier (0.8-21GHz)                                       | Mini-Circuits | ZVA-213-S+           | 619201336  | 2021.09.13 | 2022.09.12 | <input type="checkbox"/>            |
| Amplifier (18-40GHz)  | COM-MV        | KA_LNA18-40G-01      | 18050001   | 2021.10.20 | 2022.10.19 | <input type="checkbox"/>            |
| Test Antenna-Horn   | SCHWARZBECK   | BBHA 9120D           | 1201       | 2019.07.22 | 2022.07.21 | <input checked="" type="checkbox"/> |
| Anechoic Chamber  | ChangNing     | 9m*6m*6m             | 966#4      | 2020.03.16 | 2023.03.15 | <input checked="" type="checkbox"/> |
| Description   | Manufacturer  | Name                 |            | Version    |            | Use                                 |
| Test Software   | BALUN         | BL410-E              |            | V19.918    |            | <input checked="" type="checkbox"/> |

### 4.3 Test Enclosure list

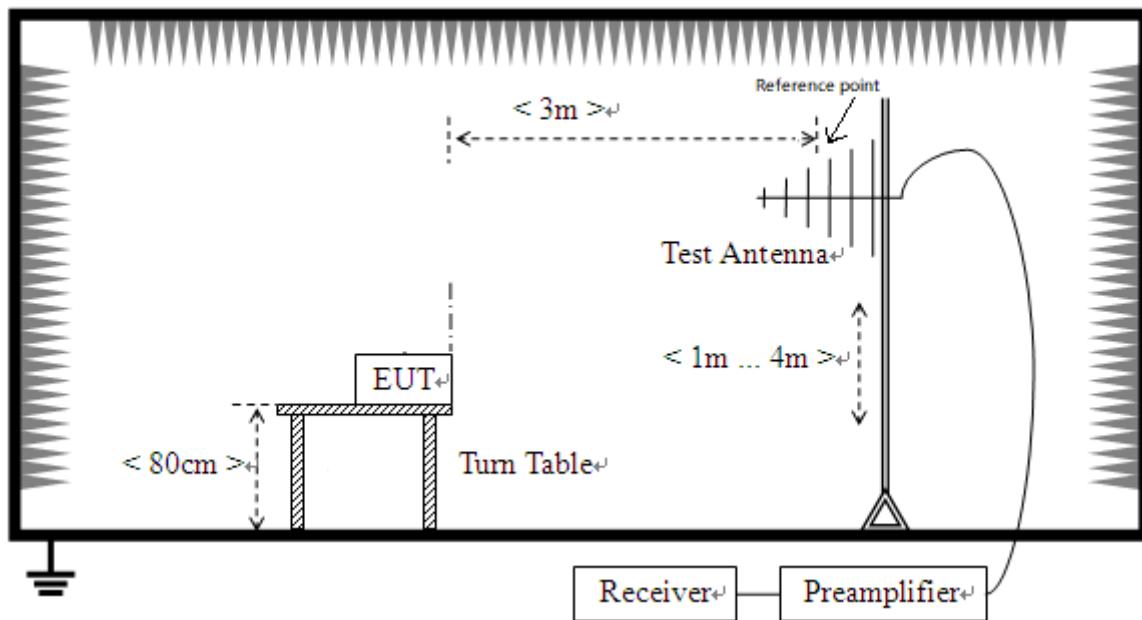
Note: Not applicable.

### 4.4 Test Configurations

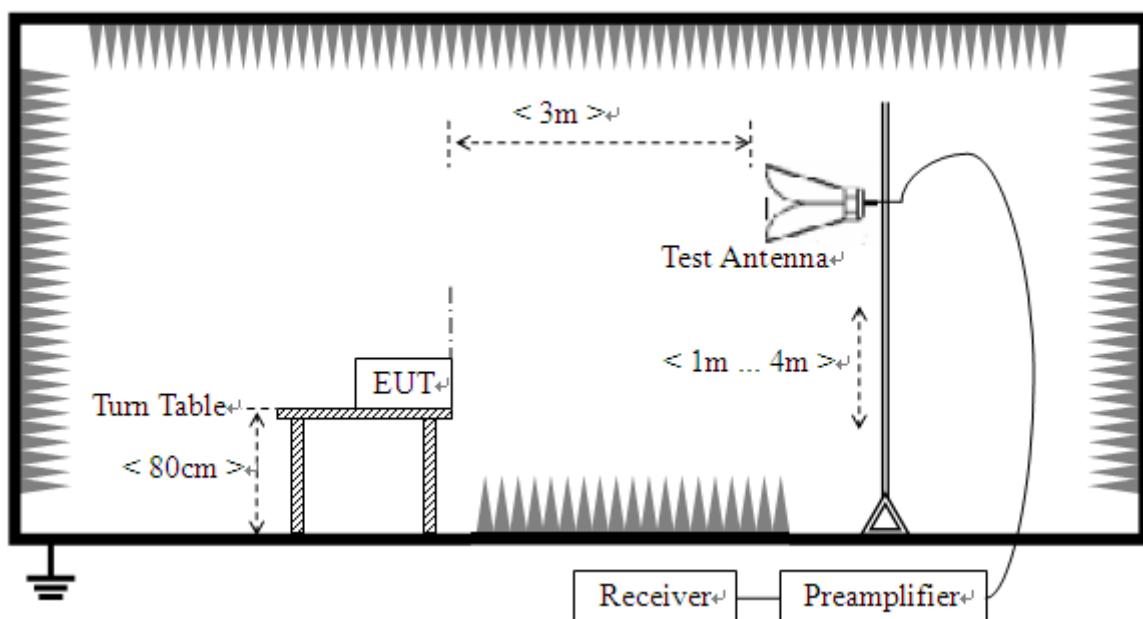
| Test Configurations<br>(TC) No. | Description                                   |
|---------------------------------|---|
| TC01                            | <u>The Working Test Mode</u><br>EUT + Battery |

## 4.5 Test Setups

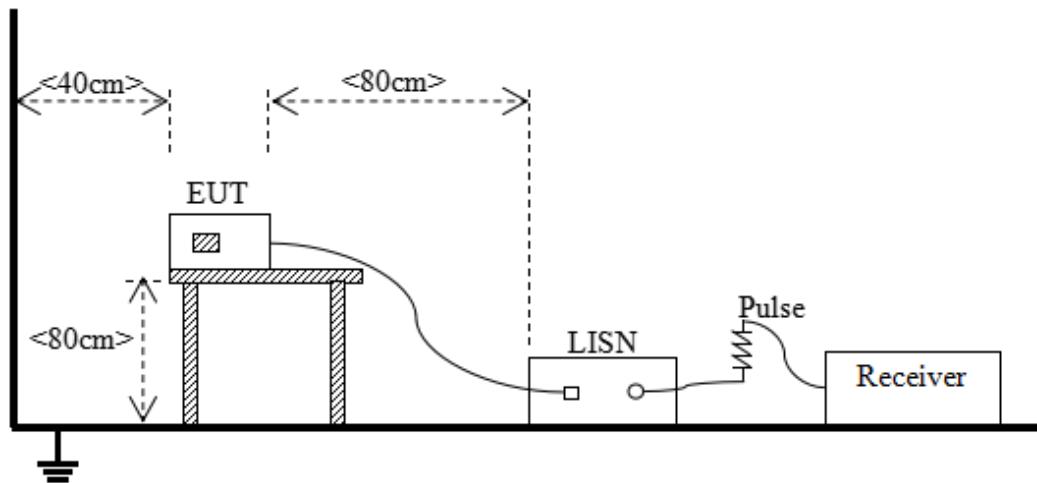
### Test Setup 1



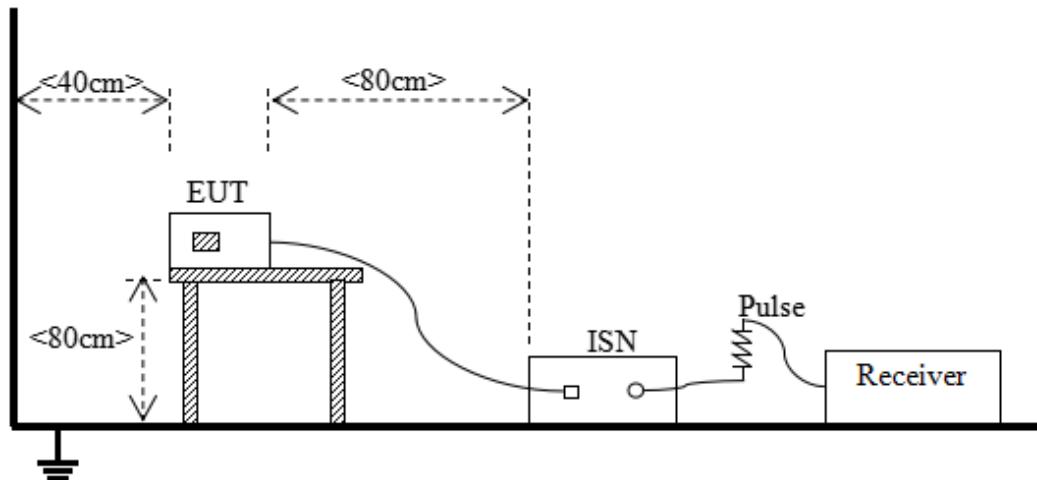
(For Radiated Emission Test (30 MHz-1 GHz))



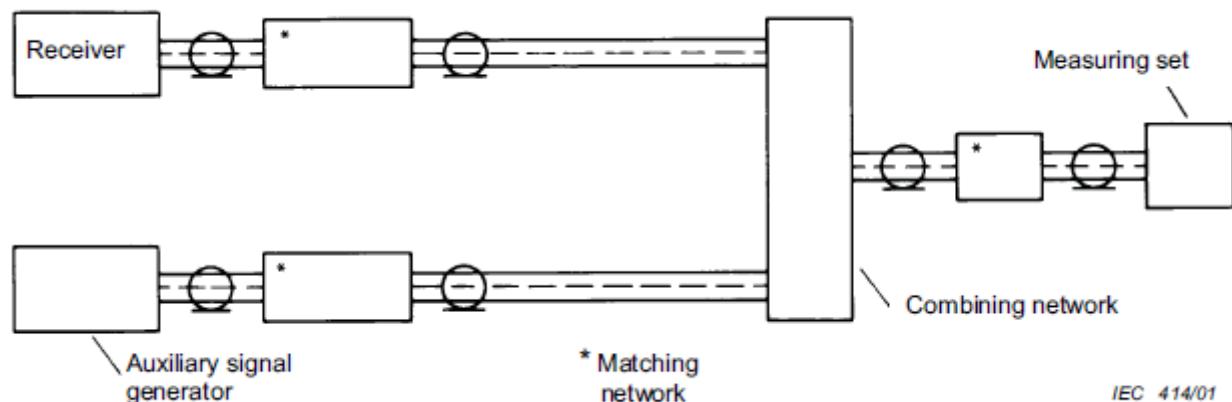
(For Radiated Emission Test (above 1 GHz))

Test Setup 2

(For Conducted disturbance voltage at mains terminals Test)

Test Setup 3

(For Conducted disturbance for asymmetric mode Test)

Test Setup 4

(For Conducted differential voltage emission (TV/FM broadcast receiver tuner ports))

## 4.6 Test Conditions

| Test Case   | Test Conditions    |                          |
|---|--------------------|--------------------------|
| Radiated Emission   | Test Setup         | Test Setup 1             |
|   | Test Configuration | TC01 <small>Note</small> |
| Note: Based on client request, all normal using modes of the normal function were tested, but only the worst test data of test mode is reported in this report. The Working Test Mode is the worst mode in this report. |                    |                          |

## 5 TEST ITEMS

### 5.1 Emission Tests

#### 5.1.1 Radiated Emission

##### 5.1.1.1 Limit

| Frequency range (MHz) | Class A (10 m)                  | Class A (3 m) | Class B (10 m)                  | Class B (3 m) |
|-----------------------|---------------------------------|---------------|---------------------------------|---------------|
|                       | Quasi-Peak Limit (dB $\mu$ V/m) |               | Quasi-Peak Limit (dB $\mu$ V/m) |               |
| 30 - 230              | 40                              | 50            | 30                              | 40            |
| 230 - 1000            | 47                              | 57            | 37                              | 47            |

| Frequency range (MHz) | Class A (at 3 m)             |                                 | Class B (at 3 m)             |                                 |
|-----------------------|------------------------------|---------------------------------|------------------------------|---------------------------------|
|                       | Peak Limit<br>(dB $\mu$ V/m) | Average Limit<br>(dB $\mu$ V/m) | Peak Limit<br>(dB $\mu$ V/m) | Average Limit<br>(dB $\mu$ V/m) |
| 1000-6000             | 80                           | 60                              | 74                           | 54                              |

Requirements for radiated emissions from FM receivers

| Frequency range (MHz) | Measurement |              | Quasi-Peak Limit (dB $\mu$ V/m)<br>Fundamental | Quasi-Peak Limit (dB $\mu$ V/m)<br>Harmonics | Quasi-Peak Limit (dB $\mu$ V/m)<br>Other |
|-----------------------|-------------|--------------|--|--|--|
|                       | Facility    | Distance (m) |  |  |  |
| 30-230                | OATS/SAC    | 10           | 50   | 42   | 30                                       |
| 230-300               |             |              |  | 42   | 37                                       |
| 300-1000              |             |              |  | 46   | 37                                       |
| 30-230                | OATS/SAC    | 3            | 60   | 52   | 40                                       |
| 230-300               |             |              |  | 52   | 47                                       |
| 300-1000              |             |              |  | 56   | 47                                       |

NOTE:

- 1) The lower limit shall apply at the transition frequency.
- 2) Additional provisions may be required for cases where interference occurs.

#### 5.1.1.2 Test Setup

Please refer to 4.5 section description of test setup of test setup 1. The photo of test setup please refer to ANNEX B.

#### 5.1.1.3 Test Procedure

An initial pre-scan was performed in the chamber using the EMI Receiver in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bi-Log antenna with 2 orthogonal polarities.

#### 5.1.1.4 Test Result

Please refer to ANNEX A.1.

## 5.1.2 Conducted disturbance voltage at mains terminals

### 5.1.2.1 Test Limit

| Frequency range<br>(MHz) | Class A                    |                         | Class B                    |                         |
|--------------------------|----------------------------|-------------------------|----------------------------|-------------------------|
|                          | Quasi-peak<br>(dB $\mu$ V) | Average<br>(dB $\mu$ V) | Quasi-peak<br>(dB $\mu$ V) | Average<br>(dB $\mu$ V) |
| 0.15 - 0.50              | 79                         | 66                      | 66-56                      | 56-46                   |
| 0.50 - 5                 | 73                         | 60                      | 56                         | 46                      |
| 5 - 30                   | 73                         | 60                      | 60                         | 50                      |

NOTE:

- 1) The lower limit shall apply at the band edges.
- 2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50 MHz.

### 5.1.2.2 Test Setup

Please refer to 4.5 section description of test setup of test setup 2. The photo of test setup please refer to ANNEX B.

### 5.1.2.3 Test Procedure

The EUT is connected to the power mains through a LISN which provides 50 Ω/50 μH of coupling impedance for the measuring instrument. The test frequency range is from 150 kHz to 30 MHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.

### 5.1.2.4 Test Result

Please refer to ANNEX A.2.

### 5.1.3 Conducted disturbance for asymmetric mode

#### 5.1.3.1 Test Limit

| Frequency range<br>(MHz) | Class A                    |                         | Class B                    |                         |
|--------------------------|----------------------------|-------------------------|----------------------------|-------------------------|
|                          | Quasi-peak<br>(dB $\mu$ V) | Average<br>(dB $\mu$ V) | Quasi-peak<br>(dB $\mu$ V) | Average<br>(dB $\mu$ V) |
| 0.15 - 0.50              | 97-87                      | 84-74                   | 84-74                      | 74-64                   |
| 0.50 - 30                | 87                         | 74                      | 74                         | 64                      |

NOTE:

- 1) The lower limit shall apply at the band edges.
- 2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50 MHz.

#### 5.1.3.2 Test Setup

Please refer to 4.5 section description of test setup of test setup 3. The photo of test setup please refer to ANNEX B.

#### 5.1.3.3 Test Procedure

Measurement of common mode (asymmetric mode) current or voltage emissions at wired network ports for attachment of unscreened balanced pairs shall be performed with the wired network port connected by a cable to an AAN. The AAN shall define the common mode termination impedance seen by the wired network port during the emission measurements.

The voltage division factor shall be added to the measured voltage measured by the receiver directly at the voltage measurement port of the AAN and the result compared with the voltage limits as applicable.

#### 5.1.3.4 Test Result

Please refer to ANNEX A.3.

## 5.1.4 Conducted differential voltage emission

### 5.1.4.1 Test Limit

| Applicability  | Frequency range (MHz) | Differential voltage limit @75Ω(dBuV) |                            |       |
|--|-----------------------|---------------------------------------|----------------------------|-------|
|  |                       | Local Oscillator Fundamental          | Local Oscillator Harmonics | Other |
| Television receivers; video recorders; PC TV broadcast receiver tuner cards; Digital audio receivers | 30 to 950             | 46                                    | 46                         | 46    |
|  | 950 to 2150           | 54                                    | 54                         | 46    |
| Tuner units (not the LNB) for satellite signal reception   | 950 to 2150           | 54                                    | 54                         | 46    |
| FM audio receivers and PC tuner cards  | 30 to 300             | 54                                    | 50                         | 46    |
|  | 300 to 1000           | 54                                    | 52                         | 46    |
| FM car radios  | 30 to 300             | 66                                    | 59                         | 46    |
|  | 300 to 1000           | 66                                    | 52                         | 46    |
| RF modulator output ports connect to TV broadcast receiver tuner ports                               | 30 to 950             | 76                                    | 46                         | 46    |
|  | 950 to 2150           | N/A                                   | 54                         | 46    |

### 5.1.4.2 Test Setup

Please refer to 4.5 section description of test setup of test setup 4. The photo of test setup please refer to ANNEX B.

### 5.1.4.3 Test Procedure

1. The impedance as seen from the TV/FM broadcast receiver tuner port of the EUT shall be equal to the nominal antenna input impedance for which the port has been designed. The EUT shall be tuned to the wanted signal from the AE (signal generator). The emission level shall be measured across the relevant frequency range taking into account the attenuation between the EUT TV/FM broadcast receiver tuner port and the measurement device.
2. The RF modulator output port of the EUT is connected to the input of the measuring device by means of a coaxial cable and a matching network (if necessary). The characteristic impedance of the cable shall be equal to the nominal output impedance of the EUT. The EUT shall produce an RF carrier modulated by a video signal defined. The RF output level shall be obtained by adding the insertion loss of the matching network to the indication of the measuring device (tuned to the video carrier frequency and its harmonics).

### 5.1.4.4 Test Result

Please refer to ANNEX A.4.

## ANNEX A TEST RESULTS

### A.1 Radiated Emission

Note 1: The symbol of “--” in the table which means not application.

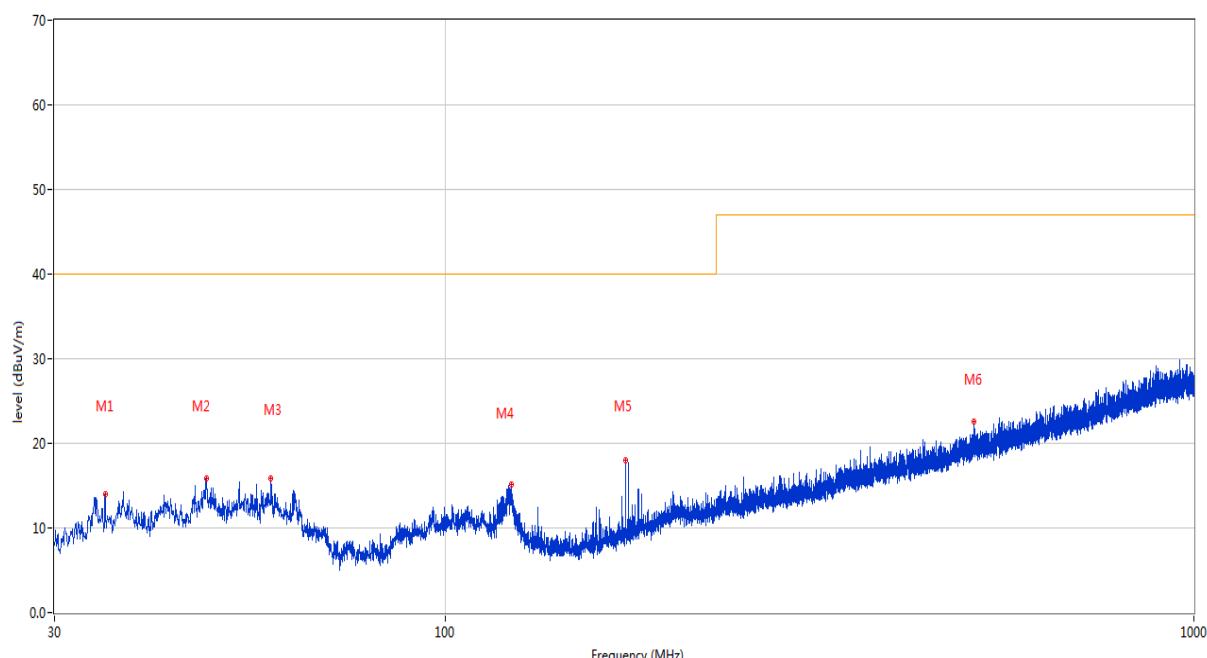
Note 2: Measurements shall be made with a quasi-peak measuring receiver in the frequency range 30 MHz to 1000 MHz.

To reduce the testing time, a peak measuring receiver may be used instead of a quasi-peak measuring receiver. In case of dispute, measurement with a quasi-peak measuring receiver will take precedence.

#### Test Data and Plots (Below 1 GHz)

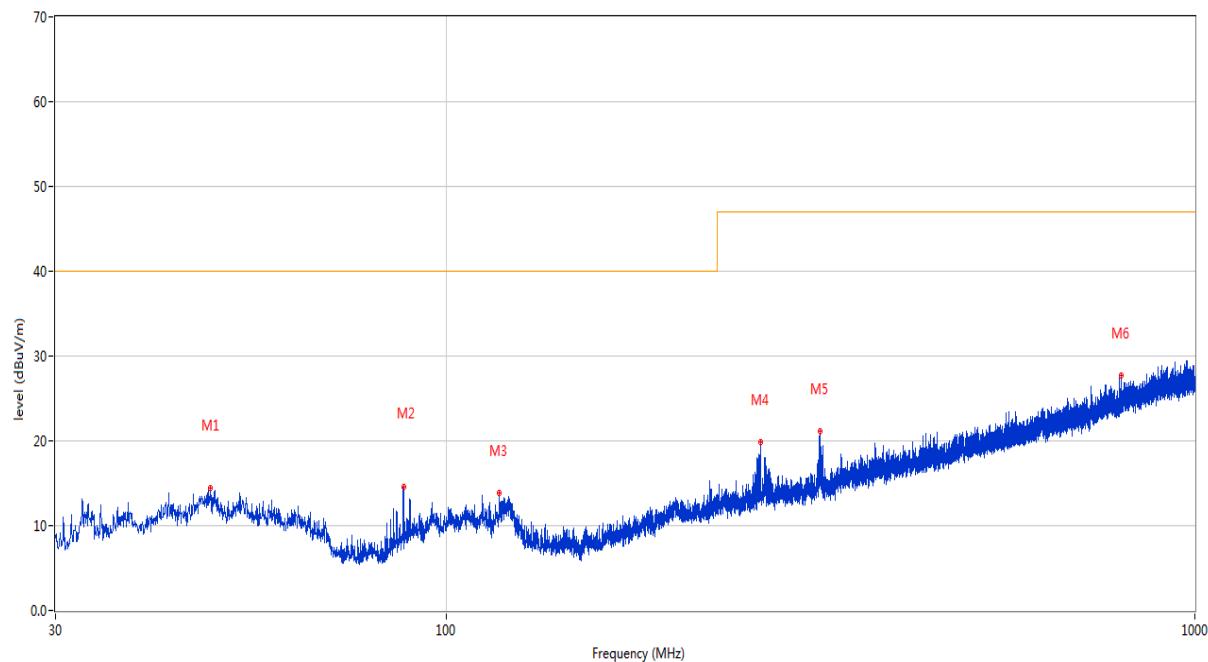
##### The Working Test Mode

###### A.1.1 Test Antenna Vertical, 30 MHz – 1 GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|----------------|-------------|----------|---------|
| 1   | 35.093          | 13.95            | -25.45      | 40.0           | -26.05          | Peak     | 257.60         | 100         | Vertical | Pass    |
| 2   | 47.848          | 15.84            | -22.67      | 40.0           | -24.16          | Peak     | 63.30          | 100         | Vertical | Pass    |
| 3   | 58.421          | 15.80            | -24.08      | 40.0           | -24.20          | Peak     | 344.50         | 100         | Vertical | Pass    |
| 4   | 122.247         | 15.08            | -26.10      | 40.0           | -24.92          | Peak     | 150.60         | 200         | Vertical | Pass    |
| 5   | 173.851         | 18.04            | -26.51      | 40.0           | -21.96          | Peak     | 15.70          | 100         | Vertical | Pass    |
| 6   | 508.016         | 22.51            | -16.45      | 47.0           | -24.49          | Peak     | 39.90          | 200         | Vertical | Pass    |

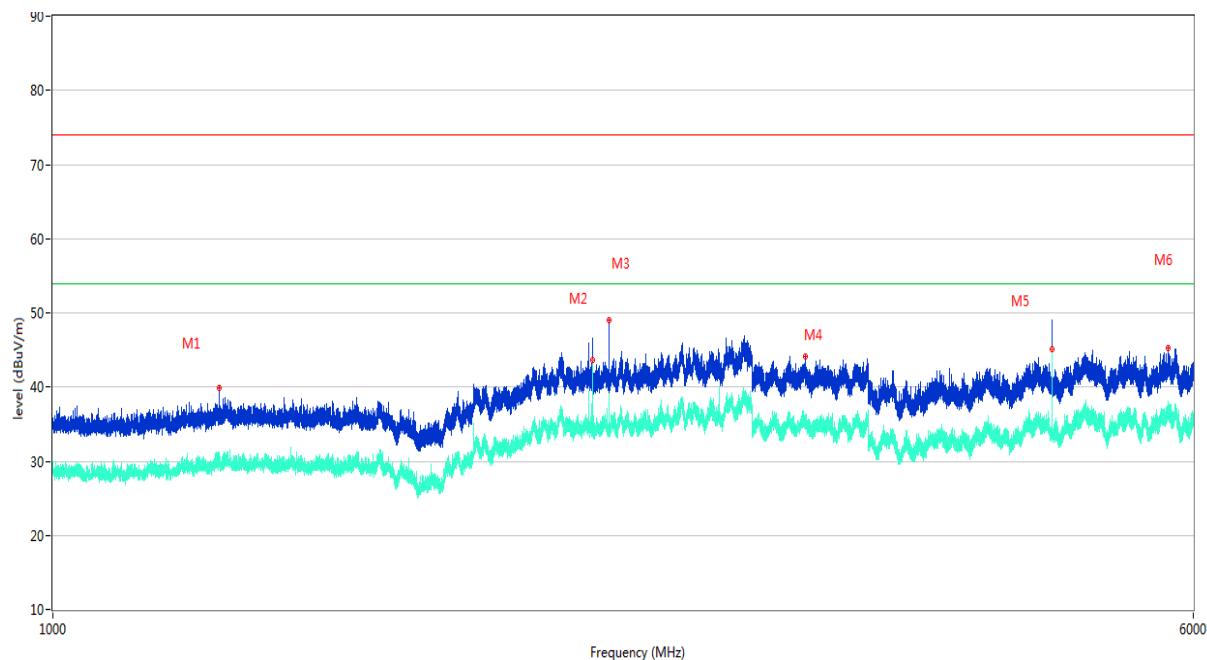
## A.1.2 Test Antenna Horizontal, 30 MHz – 1 GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|----------------|-------------|------------|---------|
| 1   | 48.333          | 14.37            | -22.57      | 40.0           | -25.63          | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 2   | 87.521          | 14.53            | -26.56      | 40.0           | -25.47          | Peak     | 282.10         | 200         | Horizontal | Pass    |
| 3   | 117.688         | 13.84            | -25.85      | 40.0           | -26.16          | Peak     | 25.00          | 200         | Horizontal | Pass    |
| 4   | 262.509         | 19.92            | -22.20      | 47.0           | -27.08          | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 5   | 315.762         | 21.21            | -21.01      | 47.0           | -25.79          | Peak     | 101.40         | 100         | Horizontal | Pass    |
| 6   | 797.804         | 27.69            | -11.50      | 47.0           | -19.31          | Peak     | 187.10         | 100         | Horizontal | Pass    |

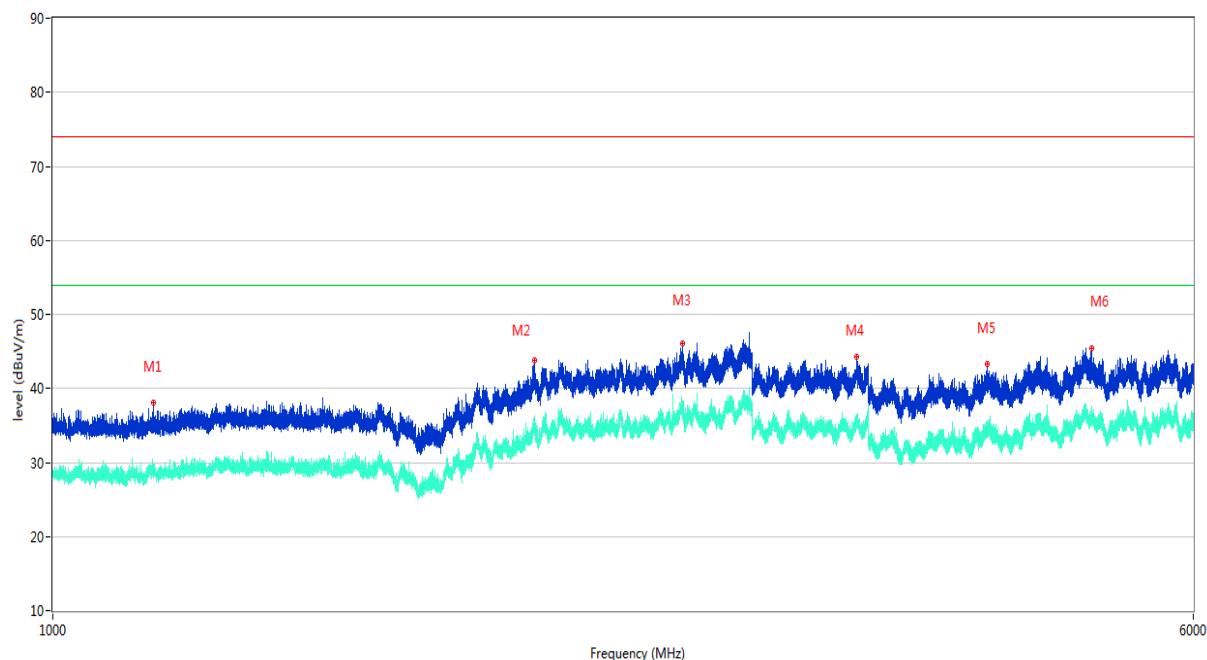
Test Data and Plots (Above 1 GHz)

## A.1.3 Test Antenna Vertical, 1 GHz – 6 GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|----------------|-------------|----------|---------|
| 1   | 1298.200        | 39.80            | -14.83      | 74.0           | -34.20          | Peak     | 20.00          | 100         | Vertical | Pass    |
| 1** | 1298.200        | 29.84            | -14.83      | 54.0           | -24.16          | AV       | 20.00          | 100         | Vertical | Pass    |
| 2   | 2335.900        | 46.50            | -10.38      | 74.0           | -27.50          | Peak     | 188.00         | 100         | Vertical | Pass    |
| 2** | 2335.900        | 43.58            | -10.38      | 54.0           | -10.42          | AV       | 188.00         | 100         | Vertical | Pass    |
| 3   | 2397.400        | 49.02            | -9.68       | 74.0           | -24.98          | Peak     | 266.60         | 100         | Vertical | Pass    |
| 3** | 2397.400        | 36.64            | -9.68       | 54.0           | -17.36          | AV       | 266.60         | 100         | Vertical | Pass    |
| 4   | 3260.700        | 44.11            | -7.93       | 74.0           | -29.89          | Peak     | 82.90          | 100         | Vertical | Pass    |
| 4** | 3260.700        | 34.60            | -7.93       | 54.0           | -19.40          | AV       | 82.90          | 100         | Vertical | Pass    |
| 5   | 4804.650        | 47.90            | -4.12       | 74.0           | -26.10          | Peak     | 219.50         | 100         | Vertical | Pass    |
| 5** | 4804.650        | 45.05            | -4.12       | 54.0           | -8.95           | AV       | 219.50         | 100         | Vertical | Pass    |
| 6   | 5768.550        | 45.21            | -2.78       | 74.0           | -28.79          | Peak     | 89.80          | 100         | Vertical | Pass    |
| 6** | 5768.550        | 36.88            | -2.78       | 54.0           | -17.12          | AV       | 89.80          | 100         | Vertical | Pass    |

## A.1.4 Test Antenna Horizontal, 1 GHz – 6 GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|----------------|-------------|------------|---------|
| 1   | 1171.900        | 38.05            | -15.82      | 74.0           | -35.95          | Peak     | 358.90         | 100         | Horizontal | Pass    |
| 1** | 1171.900        | 29.56            | -15.82      | 54.0           | -24.44          | AV       | 358.90         | 100         | Horizontal | Pass    |
| 2   | 2130.200        | 43.79            | -9.90       | 74.0           | -30.21          | Peak     | 341.20         | 100         | Horizontal | Pass    |
| 2** | 2130.200        | 34.58            | -9.90       | 54.0           | -19.42          | AV       | 341.20         | 100         | Horizontal | Pass    |
| 3   | 2688.700        | 46.04            | -6.55       | 74.0           | -27.96          | Peak     | 258.00         | 100         | Horizontal | Pass    |
| 3** | 2688.700        | 36.92            | -6.55       | 54.0           | -17.08          | AV       | 258.00         | 100         | Horizontal | Pass    |
| 4   | 3534.450        | 44.29            | -6.69       | 74.0           | -29.71          | Peak     | 134.80         | 100         | Horizontal | Pass    |
| 4** | 3534.450        | 35.17            | -6.69       | 54.0           | -18.83          | AV       | 134.80         | 100         | Horizontal | Pass    |
| 5   | 4338.450        | 43.26            | -4.65       | 74.0           | -30.74          | Peak     | 40.70          | 100         | Horizontal | Pass    |
| 5** | 4338.450        | 34.76            | -4.65       | 54.0           | -19.24          | AV       | 40.70          | 100         | Horizontal | Pass    |
| 6   | 5118.300        | 45.42            | -3.55       | 74.0           | -28.58          | Peak     | 121.40         | 100         | Horizontal | Pass    |
| 6** | 5118.300        | 35.45            | -3.55       | 54.0           | -18.55          | AV       | 121.40         | 100         | Horizontal | Pass    |

## **A.2 Conducted disturbance voltage at mains terminals Test**

Note: Not applicable.

## **A.3 Conducted disturbance for asymmetric mode**

Note: Not applicable.

## **A.4 Conducted differential voltage emission**

Note: Not applicable.

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ2260020-AE-1.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ2260020-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ2260020-AI.PDF”.

## Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--